Standard melanoma-associated markers do not identify the MM127 metastatic melanoma cell line

Parvathi Haridas
Queensland University of Technology, Australia

Melanoma is an aggressive form of skin cancer that has the highest incidence rate in Australia. Since many aspects of melanoma research rely on the use of various types of melanoma cell lines, the reliable identification of different melanoma cell lines is very important. A range of melanoma-associated markers are used to identify different types of melanoma cell lines. A common feature of many experimental investigations is that some melanoma cell lines are unable to be detected using certain markers. To address this limitation, many studies use two different markers to ensure reliable identification. The three most frequently used markers are: S100; HMB-45 and Melan-A. We explore the expression of these three markers in four different melanoma cell lines: WM35; WM793; SK-MEL-28; and MM127. The expression of these markers is examined at both the mRNA and protein level. Our results show that the metastatic cell line, MM127, cannot be detected using any of the commonly used melanoma-associated markers. This implies that it would be very difficult to identify this particular cell line in a heterogeneous sample, and as a result this cell line should be used with care.

Biography

Parvathi Haridas is pursuing her PhD from Queensland University of Technology and has completed her Post-graduation from the same institute. She has published 7 papers in reputed journals and her current work involves working alongside mathematicians on quantifying the rate of melanoma cell proliferation, cell migration and cell invasion.

p.haridas@qut.edu.au